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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,443	12/10/2003	Alexander E. Mericas	AUS920010547US2	2319

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SYNNESTVEDT & LECHNER, LLP  
2600 ARAMARK TOWER  
1101 MARKET STREET  
PHILADELPHIA, PA 191072950

EXAMINER

WEST, JEFFREY R

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/733,443		MERICAS, ALEXANDER E.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jeffrey R. West		2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1 and 3 are objected to because of the following informalities:

In claim 1, line 17, to avoid confusion, "assigns" should be ---wherein said at least one monitor control register assigns---

In claim 3, line 16, to avoid confusion, "assigns" should be ---wherein said at least one monitor control register assigns---

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is considered to be vague and indefinite because it recites, "said number equal to an integer resulting from dividing Y by X". Claim 1, however, already provides for "the number of events" and "the number of performance monitor counters". Therefore, it is unclear to one having ordinary skill in the art whether "said number" refers to "the number of events" or "the number of performance monitor counters".

Claim 3 is similarly rejected for reciting "said number equal to an integer resulting from dividing Y by X".

Claim 3 is also rejected under 35 U.S.C. 112, second paragraph, because it recites "whereby said at least one control element groups said performance monitor counters" while there is no previous mention of any "performance monitor counters". Therefore, it is unclear to one having ordinary skill in the art as to what "said performance monitor counters" refers.

Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, because they incorporate the lack of clarity present in parent claim 3.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,557,548 to Gover et al. in view of U.S. Patent Application Publication No. 2002/0026524 to Dharap.

Gover discloses a performance monitor for monitoring the occurrence of incidences of one or more events related to the operation of a processor (column 2, lines 1-7), comprising at least one monitor mode control register/control element

(column 3, lines 6-12) and a plurality of performance monitor counters (column 3, lines 6-12) operatively connected to said monitor mode control register/control element (column 3, lines 18-20 and Figure 2), said monitor mode control register/control element grouping said performance monitor counters (column 3, lines 18-28) so that when one of said performance monitor counters reaches capacity in connection with the counting incidences of a first of said events, a second of said performance monitor counters begins counting subsequent incidences of said first of said events (column 3, lines 40-63).

Gover discloses that the number of events equals X, the number of performance monitor counters equals Y, and said at least one monitor mode control register groups said performance monitor counters into groups of Z, wherein  $Y / X = Z$  (i.e. when four events are to be monitored and four counters are present, the counters are in groups of one (column 4, lines 57-60 and Figure 4) and when one large event is to be monitored and four counters are present, the counters are in a group of four (column 4, lines 60-64 and Figure 4)).

Gover also discloses that when the number of events (i.e. X) is less than the number of performance monitor counters (i.e. Y), distributing the number of available counting elements across the number of events to be counted to employ serial counting (column 2, lines 11-25 and column 4, lines 55-67).

As noted above, the invention of Gover teaches many of the features of the claimed invention including that when the number of events (i.e. X) is less than the number of performance monitor counters (i.e. Y), distributing the number of available

counting elements across the number of events to be counted to employ serial counting. While it would have been obvious to one having ordinary skill in the art to perform a conventional division operation in order to distribute the number of performance monitor counters, Gover does not explicitly disclose such a division step.

Dharap teaches a data list transmutation and input mapping system including means for distributing a number of table entries (i.e. Y) across the number of available entries (i.e. X), when  $X < Y$ , by dividing the number of table entries (i.e. Y) by the number of available entries (i.e. X), and assigning a number of table entries, said number equal to the integer resulting from dividing Y by X, to each of the number of available entries and, assigning any unassigned table entries to at least one of said available entries (0025-0026).

It would have been obvious to one having ordinary skill in the art to modify the invention of Gover to explicitly disclose a division step, as taught by Dharap, because Dharap suggests a method pertinent to the particular problem of distributing items that would have provided means for correctly, accurately, and evenly assigning the counters to events of Gover (0025-0026).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

U.S. Patent No. 3,564,212 to North teaches an apparatus for selecting, analyzing and recording data including a plurality of counters for counting classes wherein when the number of classes is less than the number of counters, an integer number is assigned to each class with remaining unassigned counters subsequently assigned to the classes.

U.S. Patent No. 5,257,358 to Cohen teaches a method for counting the number of program instructions completed by a microprocessor.

U.S. Patent No. 6,233,531 to Klassen et al. teaches an apparatus and method for monitoring the performance of a microprocessor.

U.S. Patent No. 5,835,702 to Levine et al. teaches a performance monitor within a data processing system whereby a counting function to be performed by a particular counter is dependent upon a particular event programmed within another counter within the performance monitor.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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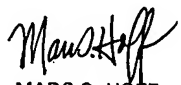
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jrw  
August 7, 2005

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800